

# NVR-B3201.27.50.191108 Release Notes

Zhejiang Uniview Technologies Co., Ltd.

# NVR-B3201.27.50.191108 Release Notes

Keywords: Version information, usage notes, precautions.

**Abstract:** This document provides information about the **NVR-B3201.27.50.191108** board software, including version information, usage notes, precautions, and features.

## Acronym

Acronym	Full Name
NVR	Network Video Recorder

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# 1 Version Information

## 1.1 Version Number

NVR-B3201.27.50.191108

## 1.2 Applied Product Models

Table 1 Applied Product Models

Product Models	Description
NVR301-04E	1 slot, 4-ch, 1 U with front panel
NVR301-08E	1 slot, 8-ch, 1 U with front panel
NVR301-16E	1 slot, 16-ch, 1 U with front panel

## 1.3 Release History

Table 2 Released Versions

Version No.	Basic Version No.	Released On
NVR-B3201.27.50.191108	NVR-B3201.27.45.191015	2019-11-08
NVR-B3201.27.45.191015	NVR-B3201.27.40.190905	2019-10-15
NVR-B3201.27.40.190905	NVR-B3201.27.36.190817	2019-09-05
NVR-B3201.27.36.190817	NVR-B3201.27.35.190801	2019-08-17
NVR-B3201.27.35.190801	NVR-B3201.27.30.190712	2019-08-01
NVR-B3201.27.30.190712	NVR-B3201.27.25.190621	2019-07-12
NVR-B3201.27.25.190621	B3226P40	2019-06-21
B3226P40	B3226P35	2019-06-01
B3226P35	B3226P30	2019-04-29
B3226P30	B3226P25	2019-04-02
B3226P25	B3226P23	2019-02-25
B3226P23	B3226P22	2018-12-26
B3226P22	B3226P11	2018-12-07
B3226P11	B3223P40	2018-10-22
B3223P40	B3223P30	2018-08-07
B3223P30	B3223P23	2018-05-31
B3223P23	B3223P20	2018-04-21
B3223P20	B3222P31	2018-03-14
B3222P31	B3222P25	2017-11-29
B3222P25	B3222P20	2017-10-24

B3222P20	B3222P16	2017-10-24
B3222P16	B3221P15	2017-09-26
B3221P15	B3221P10	2017-05-24
B3221P10	B3220P28	2017-04-27
B3220P28	B3220P11	2017-05-05
B3220P11	B3219P22	2017-02-20
B3219P22	B3219P17	2017-01-19
B3219P17	B3218P31	2016-11-28
B3218P31	B3218P29	2016-09-26
B3218P29	B3218P26	2016-09-08
B3218P26	B3218P15	2016-08-22
B3218P15	B3217P25	2016-07-23
B3217P25	B3217P16	2016-05-24
B3217P16	B3201P16	2016-04-15
B3201P16	B3201P13	2016-01-29
B3201P13	B3201P06	2016-01-11
B3201P06	Initial release	2015-11-20

## 2 Usage Notes

None.

## 3 Software Features

Table 3 Software Features

Service	Feature
Audio and video decoding	H.264 and H.265, 4K resolution display, up to 16Mbps bit rate.
Data storage	Local storage of recordings in hard disk(s).
Web-based management	Web-based user interface for device configuration and management.

## 4 Version Change Description

### 4.1 Feature Change Description

Table 4 NVR-B3201.27.25.190621 Feature Changes

Item	Feature	Description
Newly added features	H.265	Auto switch to H.265 when first connected is enabled by default.
	UNP client software upgrade	Upgrade UNP client software to SoftEther VPN.
	Live view without plug-	Live view is available without plug-in on the Web interface.

Item	Feature	Description
	in	
	LPR	Add license plate recognition display page.
	New local interface	New local GUI; New interaction design in wizard, channel configuration, playback and VCA.
Improved features	Retrieve password	Retrieve password by email and mobile client.
	Preset patrol	Up to 32 presets are allowed for one preset patrol.
	Playback in main stream	Playback in standard definition automatically switches to main stream for a maximized window.
	Separate permissions	Separate channel live view and audio permissions.
	Alarm configuration	Add human body detection.
	Improve switching performance when maximizing/restoring window	For connected Topsee cameras, live video starts quickly when maximizing or restoring window.
	Face recognition	Support adding face snapshots to face library.
Deleted features	None	None.

Table 5 B3226P11 Feature Changes

Item	Feature	Description
Newly added features	LPR	Whitelist/blacklist vehicle plate recognition.
	Heat map	Support heatmap statistics and export.
	GA/T1400	Upload face & plate snapshots to VMS.
	Add device without account	Scan to add NVR on app without cloud account.
	Onvif	Support Profile S.
	Pattern unlock	Support drawing pattern to unlock.
	Alarm push notification	Push alarm notification traversing NAT.
	Web maintenance	Add net detection & network flow.
	Auto add IPC	Automatic search and add IPC for 1-SATA NVR with zero configuration.
	GDPR	Add GDPR privacy statement.
Improved features	Improved PTZ presets	Configurable PTZ preset name.
	Improved live view startup speed	IPC live view starts up quickly.
Deleted features	None	None.

Table 6 B3223P20 Feature Changes

Item	Feature	Description
New features	Add IPC across Internet	Add IPCs to the NVR across the Internet.
	SNMP	System time obtainable.

Item	Feature	Description
	POS connection	Connect to POS and display POS OSD.
Improved features	Improved diagnostic info collection	Support the backup of IPC logs on NVR.
	Alert configuration	Added two alert types: array degrade and array damaged.
	Alarm window	Displays alarm status with two tabs and added multiple alarm types.
	Web recording download	Include recording start and end times in filenames for easier differentiation.
	Maintenance info collection	Added network bandwidth statistics on the Web.
Deleted features	None	None

Table 7 B3222P16 Feature Changes

Item	Feature	Description
New features	USB connected burner	Connect to an external USB burner to burn recordings to a disc. Supported by some models only.
Improved features	TLS/SSL	Achieves complete SSL/TLS encryption.
	Maintenance info storage	Save space by saving maintenance logs to hard disks.
	IPC upgrade by cloud	Adds a Check button (to check for update) and displays latest version info.
	3G/4G	Adds custom mode for access points.
	Playback	Allows user to choose third stream for playback.
	Alarm triggered preview	Supports multi-window display for alarm-triggered preview.
	N+1 function	Supports IPC connected by RTSP.
	Parameter configuration	Increases image quality levels from 6 to 9.
	Password policy	Added an enable/disable setting and changed some policy.
Deleted features	None	None

Table 8 B3221P10 Feature Changes

Item	Feature	Description
New features	Defocus Detection	Determines whether the camera is defocused, and if so triggers alarm.
	Scene Change	Determines whether the scene is changed, and if so triggers alarm.
	Auto Tracking	Supports auto tracking of moving objects with IP cameras supporting this function.
	People Counting of Multiple Cameras	Displays people counting data of multiple cameras together.
	People Counting OSD	Displays people counting data by OSD in real time.
	Sort Camera	Supports changing sequence of selected cameras in camera list.
	Watermark	Supports custom encryption of video data with compatible IP cameras and EZPlayer, to avoid video info deletion and modification.

Item	Feature	Description
Improved features	Optimized H.265 compatibility	Supports third-party H.265 IP camera connecting to Uniview NVR through ONVIF.
	Log Export Format	The default format of exported logs is changed from TXT to CSV.
	Auto-Delete File(s)	Adds auto-delete file(s) configuration on Web client.
	Admin Management	Supports admin to force guest offline.
	Diagnostic Information	Adds basic information of IP camera to exported diagnostic information.
	Network Setting	Supports auto-completion of subnet mask when setting network address.
	Quick Match for Camera List	Supports input selection and fuzzy matching for camera list.
	Professional Surveillance Keyboard	1. Supports selecting camera and date for playback. 2. Supports patrol and route.
Deleted features	None	None

Table 9 B3220P28 Feature Changes

Item	Feature	Description
New features	Snapshot	More models support snapshot: NVR301-04E, NVR301-08E, NVR301-16E, NVR301-04-P4, NVR301-08-P8, NVR301-16-P8, NVR301-04L-P4, NVR301-08L-P8, NVR301-16L-P8.
Improved features	None	None
Deleted features	None	None

Table 10 B3220P11 Feature Changes

Item	Feature	Description
New features	None	None
Improved features	Optimized maintenance	The size of Ping packet and captured packet is configurable.
	Optimized camera configuration	Supports coping IP camera configurations of OSD, motion detection, video loss and tampering detection.
	Optimized PTZ preset	Allows the user to delete preset and only added preset will be displayed in the list.
	Optimized password recovery	Supports scanning QR code on mobile client to recover password.
Deleted features	None	None

Table 11 B3219P17 Feature Changes

Item	Feature	Description
New features	U-Code	U-Code is a patented technology of Uniview that accomplishes higher compression efficiency than H.264/H.265.
	NAS	Supports NAS storage device.



Item	Feature	Description
	Auto guard	Enables the PTZ camera to operate automatically as configured if no operation is performed during a certain time period. This function can avoid situations where the camera is left to monitor an incorrect scene by user's negligence.
	Multicast	Makes live view possible even when the number of connecting Web clients exceeds the limit the NVR can accommodate.
	USB Device window	Automatically displays the window when a USB storage device is plugged in during device startup or in preview status. The window can also be opened by clicking the USB icon on the screen toolbar.
Improved features	Uniview logo	Displays Uniview logo in idle preview windows. This feature is only available to Uniview version.
	Auto switch to	Automatically switches to H.265 and U-Code when connected by Uniview IPC and sends default bitrate settings to IPC.
	Copy video compression and U-Code settings	Allows user to copy video compression and U-Code settings and quickly apply them to other IPCs.
	Draw schedules	Allows users to make recording and snapshot schedules by drawing.
	Instant playback	Instant playback time is now configurable.
	Mouse operation	Allows user to adjust the moving speed of mouse pointer.
	IPC upgrade	Upgrade a batch of IPCs by cloud or USB storage device.
	Preview	Live view window's yellow borders disappear automatically in 20 seconds if no operation is performed.
	Snapshot	The window borders flash white when taking a snapshot during live view or playback.
	Resolution	Restore default resolution by pressing and holding the scroll wheel for at least 3 seconds.
	DHCP	DHCP is enabled by default for international versions.
Playback by tag	Allows playback by tag on Web client.	
Deleted features	None	None

Table 12 B3218P15 Feature Changes

Item	Feature	Description
Newly added features	VCA	Work with smart IPC to achieve VCA functions (smart detection and smart search), enhanced playback by event.
	RTSP-based connection to IPC	Adds IPC by RTSP for live view and playback (IPC configuration not supported).
	RTSP URL format on screen	Displays RTSP URL format and a description, and users can view live video from a channel of the NVR by visiting the corresponding URL using an RTSP-enabled device.
	Ucode	Uniview's private encoding rules which greatly improve the compression rate compared with average encoding modes.
	IPv6	Supports IPv6 and offers three options to set an IPv6 address: Manual, DHCP, Router Advertisement.
	Integrated port	Integrates multiple ports (HTTP port, ONVIF port, Media port, and SDK port) into one HTTP port.
Improved	Quick view of serial	View the device's serial number by double-clicking the lower left corner

features	number	of the login dialog box as admin.
	Improved encoding configuration	Automatically refreshes encoding configurations; automatically changes bit rate as the user changes resolution and frame rate.
	One-click cancellation of binding to EZCloud	Allows the user to cancel binding to EZCloud account by clicking the Delete button without visiting the EZCloud website.
	Enhanced ease of use	Displays device operation time, camera offline cause, a system message when the USB storage device is unplugged, and added the Camera Name column under Advanced.
	Enhanced corridor mode	Added 4/9/10/12/16 corridor modes on the system interface.
	Added OSD configurations	Added font color and size options for OSD configuration.
	Optimized playback	Supports reverse playback; max. 256x playback speed on the system interface, and 16x playback speed on the web interface; with apparently improved fluency at low playback speed.
	Optimized alarm-triggered preview	Changes alarm-triggered preview from "sequence display three times" to "display from alarm is reported till alarm is cleared."
Deleted features	None	None

Table 13 B3217P16 Feature Changes

Item	Feature	Description
Newly added features	Cache post recording	Videos are saved to the SD card if connection to the IP camera is lost. When the camera gets back online, videos saved on the SD card will be transmitted and stored on the NVR. No configuration is required.
	Disk management group	Allows the user to designate disks to different groups and specify different disk groups to store video from different cameras, making storage space calculation for each camera unnecessary.
	Redundant storage	Extra copy for important recordings.
	Improved colors for the user interface	Uses Uniview standardized style to improve the user interface and enhance the identification of icons and symbols.
	Web-based control of system interface	Allows the user to change image resolution and preview sequence on the system interface through the Web interface.
	Alarm-triggered pop-up window	A window pops up on the system interface to alert the user when an alarm occurs.
	ARP protection	Obtains the MAC of its gateway at first startup and communicates with the gateway with this MAC ever since. The MAC can be edited as needed.
Improved features	Snapshot	More models support snapshot: NVR308-16E, NVR308-32E, NVR308-64E, NVR308-32R, NVR308-64R, NVR304-16E, NVR304-32E, NVR-B200-E8@16, NVR-B200-E8@32, NVR-B200-E8@64, NVR-B200-R8@32, NVR-B200-R8@64, NVR208-32  Current models that support snapshot: NVR202-08EP, NVR202-08EN, NVR202-16E, NVR202-16EP, NVR202-16EN, NVR204-16E, NVR208-16
	Optimized system interface for ease of use	Improves window toolbar, shortcut menu, PTZ control, startup wizard, and the menu bar at the bottom of the screen for easier use.
	Enhanced playback on the Web interface	Allows smart playback and event-based playback on the Web interface.

Item	Feature	Description
	PTZ control	The system interface supports PTZ control using shortcut keys.
	Enhanced ability to connect to IP cameras	Added the following for Uniview IP cameras: 1. White balance mode 2. Scenes 3. Alarm indicating failed camera access attempts
	Enhanced ONVIF downlink	Allows the user to disable time synchronization with IP cameras. This feature prevents the problem that some third-party IP cameras cannot get online because they do not support time zone synchronization or time synchronization.
	Enhanced ONVIF uplink	1. Combines uplink ONVIF port with HTTP port to improve networking adaptability. 2. Reports more alarm types (disk offline, disk abnormal). 3. Allows the obtainment and modification of the device name.
	Log export	Allows the user to export logs as CVS files for easy search and management.
	One plug-in for NVR and IPC	Allows the user to install the plug-in only once for accessing the NVR and IP cameras using a Web browser.
	Plug&play	Changes the default IP address to 192.168.1.30 while also supports 192.168.0.30 to adapt to default network environments of most routers and network switches and simplify configuration.
	Network security	Improves protection against network attacks for better user privacy.
	User management	Increases the number of concurrent remote users from 16 to 128.
	Web-based upgrade	Filters file types for local upgrade through the Web interface.
	Maintenance tool	Allows the changing of user password through EZTools.
Deleted features	None	None

## 4.2 Operation Change Description

None

## 4.3 Solved Issues

None

## 5 Related Documents and Delivery Method

Table 14 Related Document List

Manual Name	Manual Version	Delivery
Network Video Recorders Quick Guide	V1.00	Deliver with device.

## 6 Version Upgrade Guidance

### 6.1 Precautions

- This software system includes a software program mirror (Program.bin). Before you start upgrade, please back up configuration data through the system or Web interface in case the upgrade fails.
- Maintain proper network connection and power supply during the upgrade.

### 6.2 Upgrade Procedure

The version can be upgraded through the system interface and the Web interface, both support cloud upgrade.

### 6.3 Upgrade Through the System Interface

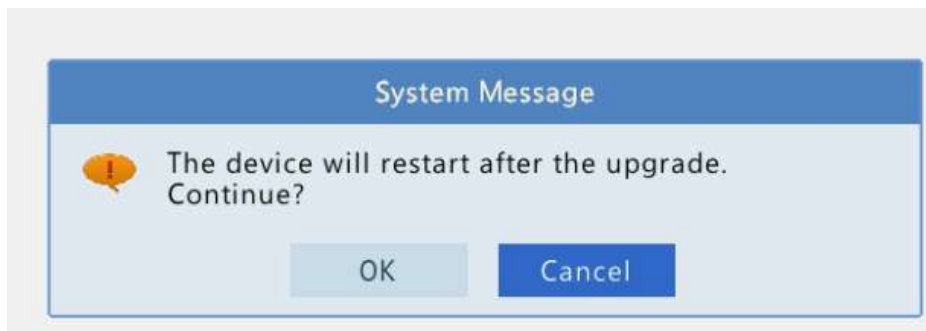
The system interface provides two options for upgrading the system software: local upgrade using a USB drive and cloud upgrade.

#### 1. Local upgrade

Before you start, copy the correct upgrade file to the root directory of the USB drive.

- (1) Plug the USB drive into the USB interface on the NVR.
- (2) Log in to the system interface as “admin”.
- (3) Click **Maintain > Upgrade**.
- (4) Click **Upgrade**, select the upgrade file from the drop-down list, and then click **Upgrade**. A prompt message appears.
- (5) Click **OK**.

Figure 1 Prompt Message



- (6) The NVR will restart automatically when the upgrade is completed.

#### 2. Cloud upgrade

Before you start, check that the NVR is correctly connected to the public network.

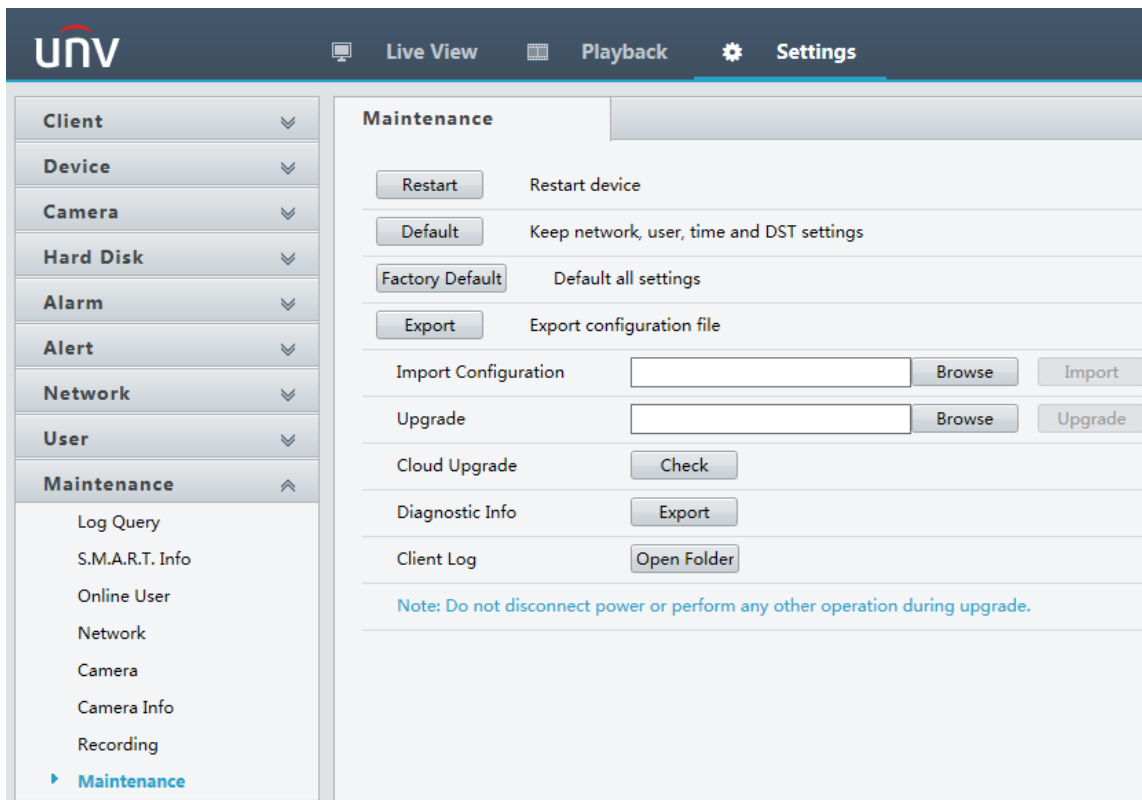
- (1) Click **Maintain > Upgrade**, and then click **Check** to check for the latest version.
- (2) Click **Upgrade** after a newer version is detected.

## 6.4 Upgrade Through the Web Interface

Perform the following steps to upgrade through the Web interface:

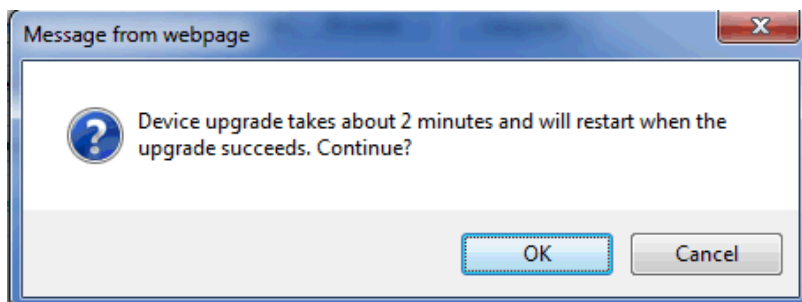
- (1) Log in to the Web interface as “admin”.
- (2) Click **Settings > Maintenance > Maintenance**.

Figure 1 System Maintenance



- (3) Click **Browse** right to the **Upgrade** field, select the **Program.bin** file to upgrade, and then click **Upgrade**.
- (4) If the NVR is connected to the public network, you may also click **Check** to perform a cloud upgrade. If a newer version is detected, a prompt message will appear. Click **OK** to start upgrade.

Figure 2 Prompt Message



- (5) The NVR will restart automatically when the upgrade is completed.

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